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**E05C 9/04**

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**E2A AAK AEC A106 A160 A190**

(56) Documents Cited:  
**GB 2258882 A** **GB 2141482 A**  
**GB 2054029 A** **GB 1582373 A**  
**US 4616864 A** **US 4253688 A**

(58) Field of Search:  
UK CL (Edition W ) **E2A**  
INT CL<sup>7</sup> **E05C**  
Other: **WPI, EPODOC, JAPIO**

(54) Abstract Title: **Bolt mechanism housing for door edge**

(57) In order to obviate forming on site a groove in an edge 4 of a door for receiving a shoot bolt locking device, the invention provides a device 8 in the form of an edge guard which is for preference, and in the embodiment, a metal, suitably Aluminium extrusion which has a flat body 8' with a lateral extent, defined by outside walls 9, which is just sufficient to receive the edge 4 of the door 1. When in position on the edge 4, internal substantially parallel and spaced rib members 10 engage the free edge of the edge 4 and this provides a hollow track 10' in which longitudinally bodily shiftable flat bars 11 forming shoot bolt operating devices or the shoot bolts 5 themselves are received. Thus the device 8 forms a housing between the rib members 10 and body 8'.

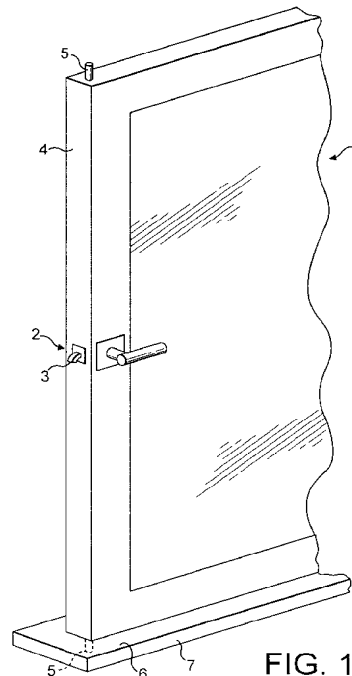


FIG. 1

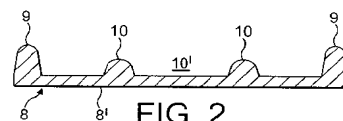
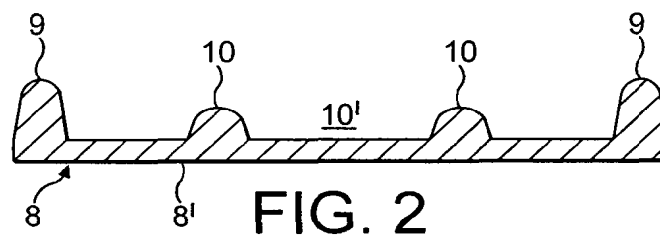
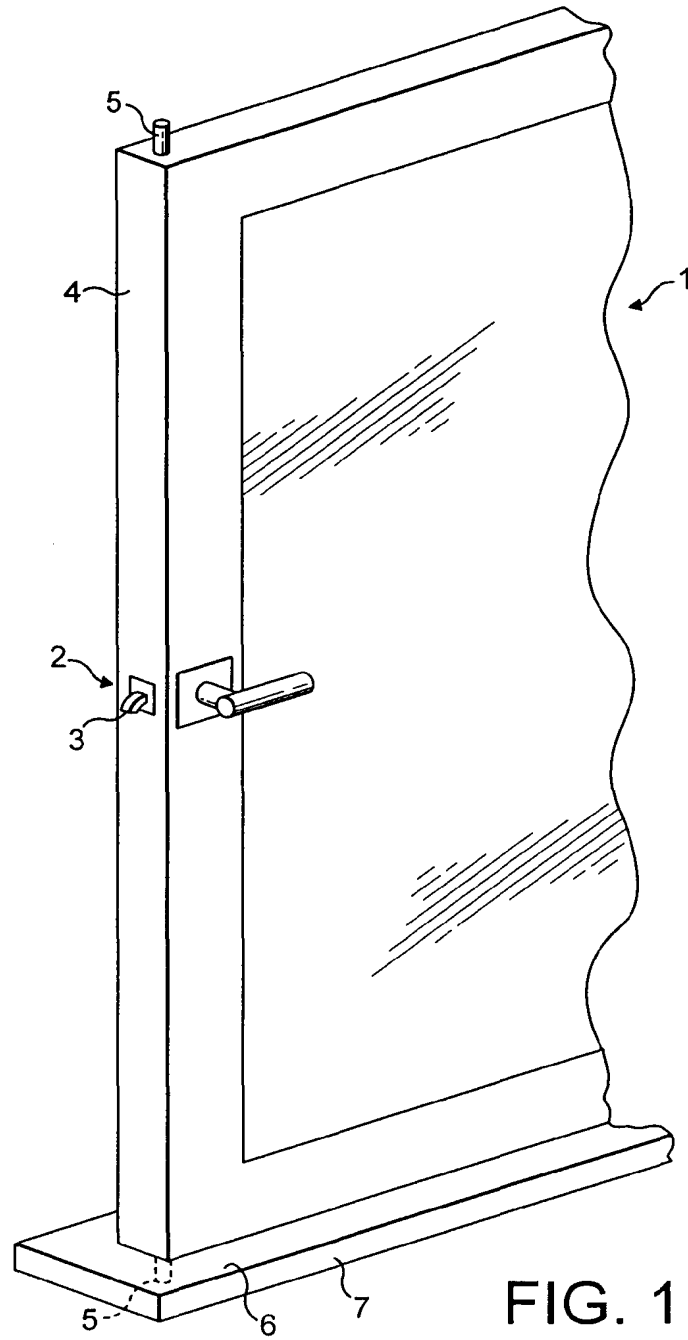


FIG. 2



**CLOSURES**

The invention relates to closures, and particularly to such closures as doors and windows which are mounted in an opening to close the same.

Often such closures have door furniture mounted on them to effect locking and unlocking of the closure, there usually being a key or handle-operated shoot bolt arrangement which is used to shoot a bolt into or into cooperative combination with a keeper on a jamb of the closure. Such shoot bolt arrangements are usually mounted on a nose of the closure.

This can provide for a complicated mounting arrangement.

It is an object of the invention to seek to mitigate this disadvantage.

According to the invention there is provided a device for a lock arrangement of a closure, comprising a housing in which a longitudinally shiftable member of the lock arrangement can be mounted for bodily movement.

The housing may comprise an elongate member defining a track for the longitudinally shiftable member.

The track may comprise two spaced apart rib members which may extend longitudinally of the housing, substantially in parallel and substantially inboard of lateral extremities of the housing.

The housing may be extruded from any suitable material such as metal, plastic, or metal coated with plastic.

It will be understood that the invention extends to a nose of a closure to which a device as hereinbefore defined is mounted.

A device embodying the invention is hereinafter described, by way of example, with reference to the accompanying drawings.

Fig. 1 shows a perspective view of a closure such as a French door or window; and

Fig. 2 shows a transverse sectional view of a device embodying the invention for mounting on the nose of the door.

Referring to the drawings, there is shown schematically in Fig. 1 a French door 1 which is locked and unlocked by a handle-operated shoot bolt arrangement 2 (which could also incorporate a latch 3) which has a mechanism normally set into the nose 4 of the door 1, the shoot bolts 5 being shown extended to engage in a respective keeper 6 of a jamb 7. To incorporate the shoot bolt arrangement 2, a groove has to be milled, cut, or chased in the nose 4, which is usually a time-consuming and expensive operation when carried out on site, the usual practice. To overcome this, there is provided a device 8 in the form of a nose guard which is for preference, and in the embodiment, a metal, suitably Aluminium extrusion which has a flat body 8' with a lateral extent, defined by outside walls 9, which is just sufficient to receive the nose 4 of the door 1. When in position on the nose 4, internal substantially parallel and spaced rib members 10 engage the free edge of the nose 4 and this provides a hollow track 10' in which longitudinally bodily shiftable flat bars 11 forming shoot bolt operating devices or the shoot bolts 5 themselves are received. Thus the device 8 forms a housing between the rib members 10 and body 8'.

No cutting, chasing or milling of the nose of the door is required, and the locking arrangement 2 can readily be mounted on the nose 4 and then encapsulated in the housing 8', 10 for reciprocation in the track 10'.

**CLAIMS**

1. A device for a lock arrangement of a closure, comprising a housing in which a longitudinally shiftable member of the lock arrangement can be mounted for bodily movement.
2. A device according to Claim 1, comprising an elongate member defining a track for the longitudinally shiftable member.
3. A device according to Claim 2, the track comprising two spaced apart rib members extending longitudinally of the device, substantially in parallel and substantially inboard of lateral extremities of the device.
4. A device according to any preceding claim, extruded from any suitable material such as metal, plastic, or metal coated with plastic.
5. A device according to any preceding claim, comprising lateral walls adapted to engage opposite major surfaces of a nose of a door.
6. A device for a lock arrangement of a closure, substantially as hereinbefore described with reference to the drawings.
7. A closure to which a device according to any preceding claim is mounted.



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Examiner: Philip Silvie

Claims searched: 1-5,7

Date of search: 20 July 2004

**Patents Act 1977: Search Report under Section 17****Documents considered to be relevant:**

Category	Relevant to claims	Identity of document and passage or figure of particular reference
X	1,2,5,7 at least	GB 2054029 A (COCKER) see fig. 5
X	1,2,5,7 at least	US 4253688 A (YOSHIDA) see fig. 1
X	1,2,7 at least	US 4616864 A (HARDWARE) see fig. 1
X	1,2,7 at least	GB 1582373 A (GLC) see fig. 9
X	1,2,7 at least	GB 2258882 A (FERCO) see figs. 1,2
X	1,2,7 at least	GB 2141482 A (DOVER) see fig. 1A

**Categories:**

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

**Field of Search:**Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>W</sup> :

E2A

Worldwide search of patent documents classified in the following areas of the IPC<sup>07</sup>

E05C

The following online and other databases have been used in the preparation of this search report

WPI, EPODOC, JAPIO